

2010 and Beyond A Vision of America's Transportation Future

Hudson Institute

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Project Purpose:

“To produce a defining policy document on the future of transportation from which public and private sector leaders will be able to chart our nation's course in this critical area.”

Vision 2010

Project Financial Sponsors

- American Association of State Highway Transportation Officials (AASHTO)
- American Public Transportation Association (APTA)
- Transportation Research Board (TRB)
- Hudson Institute
- Private sector contributors

Hudson Projects

- 21st Century Transportation Finance-Cambridge Systematics, Lance Grenzeback
- 21st Century Freight Mobility-ICF Consulting, Sergio Ostria
- Transportation, Technology and the 21st Century Vehicle-Weiland Consulting Company, Rick Weiland

Hudson Projects-cont.

- Technology Implications for 21st Century Transportation Systems-Delcan, Richard Mudge
- Transportation and the Global Economy-Hudson Institute, Irwin Stelzar
- Transit Futures-Jeffrey A. Parker & Associates, Jeff Parker

Hudson Projects-cont.

- 21st Century Demographic Influences on Transportation-Hudson Institute, Herb London
- Project Manager-Thomas R. Warne, Tom Warne and Associates

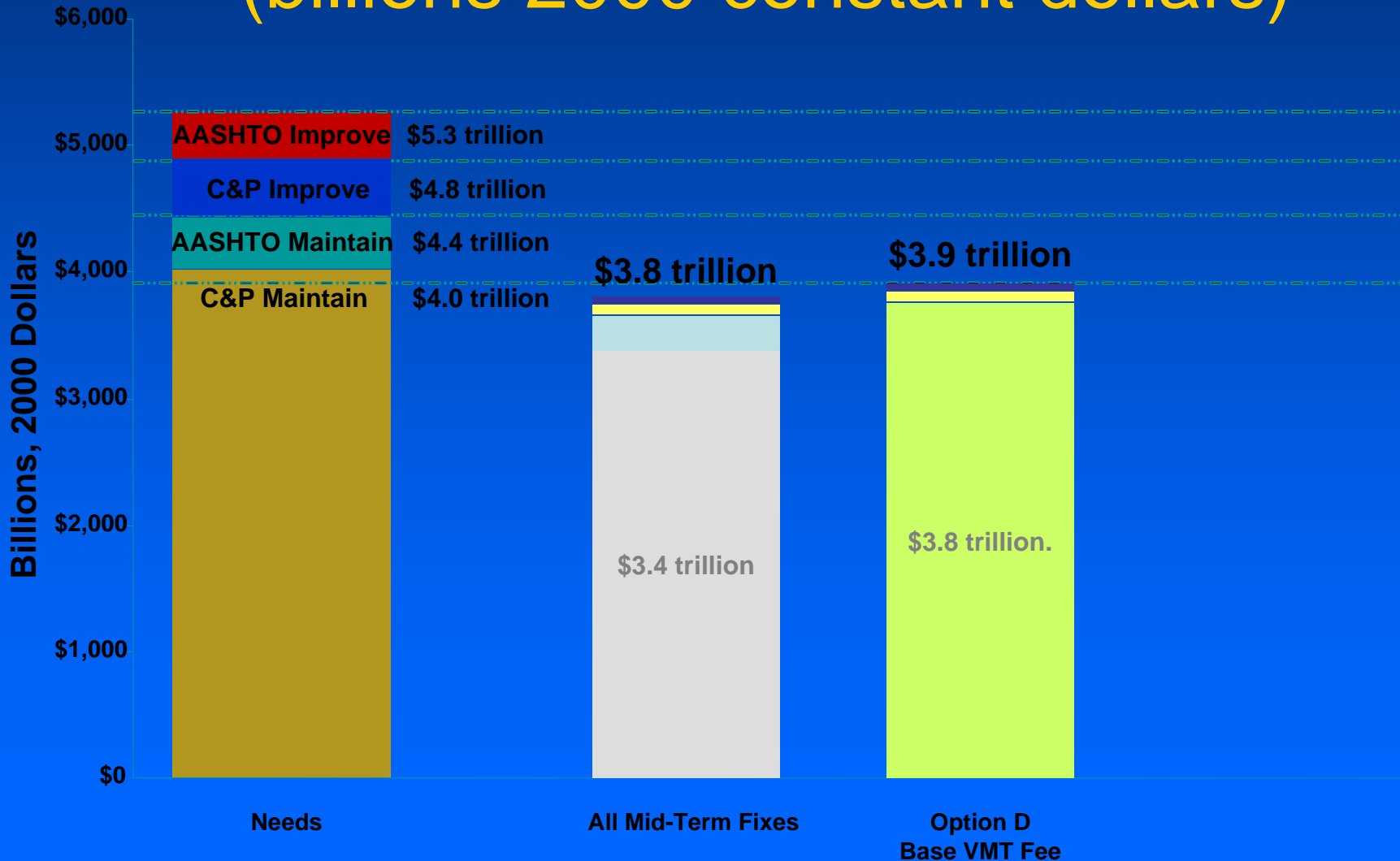
Key Findings

21st Century Transportation Finance



Cumulative Needs & Revenues 2005 to 2025

(billions 2000 constant dollars)



Mid-Term Solutions

- Increase and index the motor fuel tax
- Increase tolling
- Issue tax credit bonds

Long-Term Solutions

- Vehicle mileage-based program

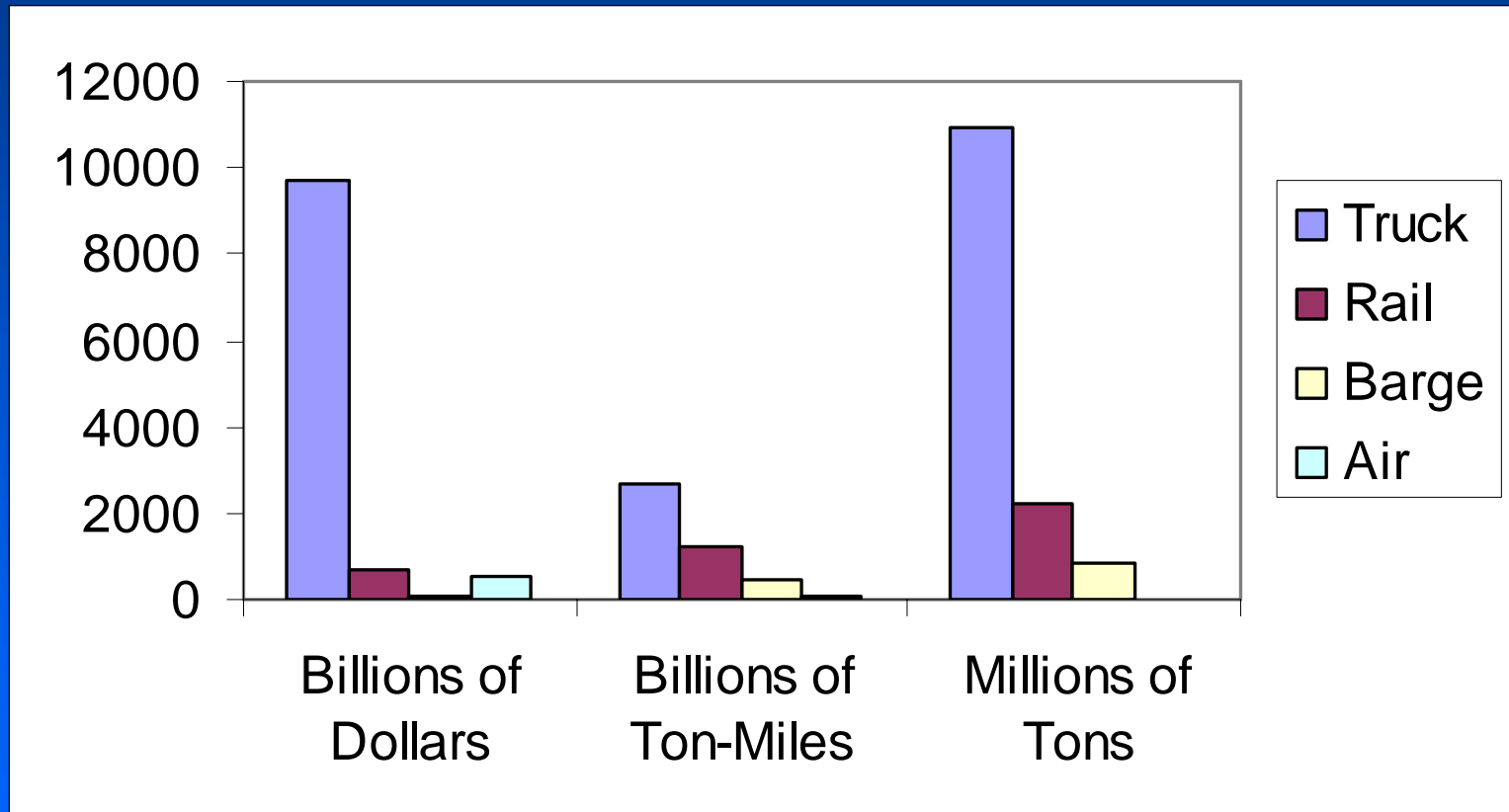
21st Century Transportation Finance

- Current revenue streams are inadequate to even maintain the system
- Current revenue streams are inadequate to improve the system
- Even if all currently proposed strategies are implemented the funding gap remains
- 2009-Highway Trust Fund balance goes to zero

21st Century Freight Mobility



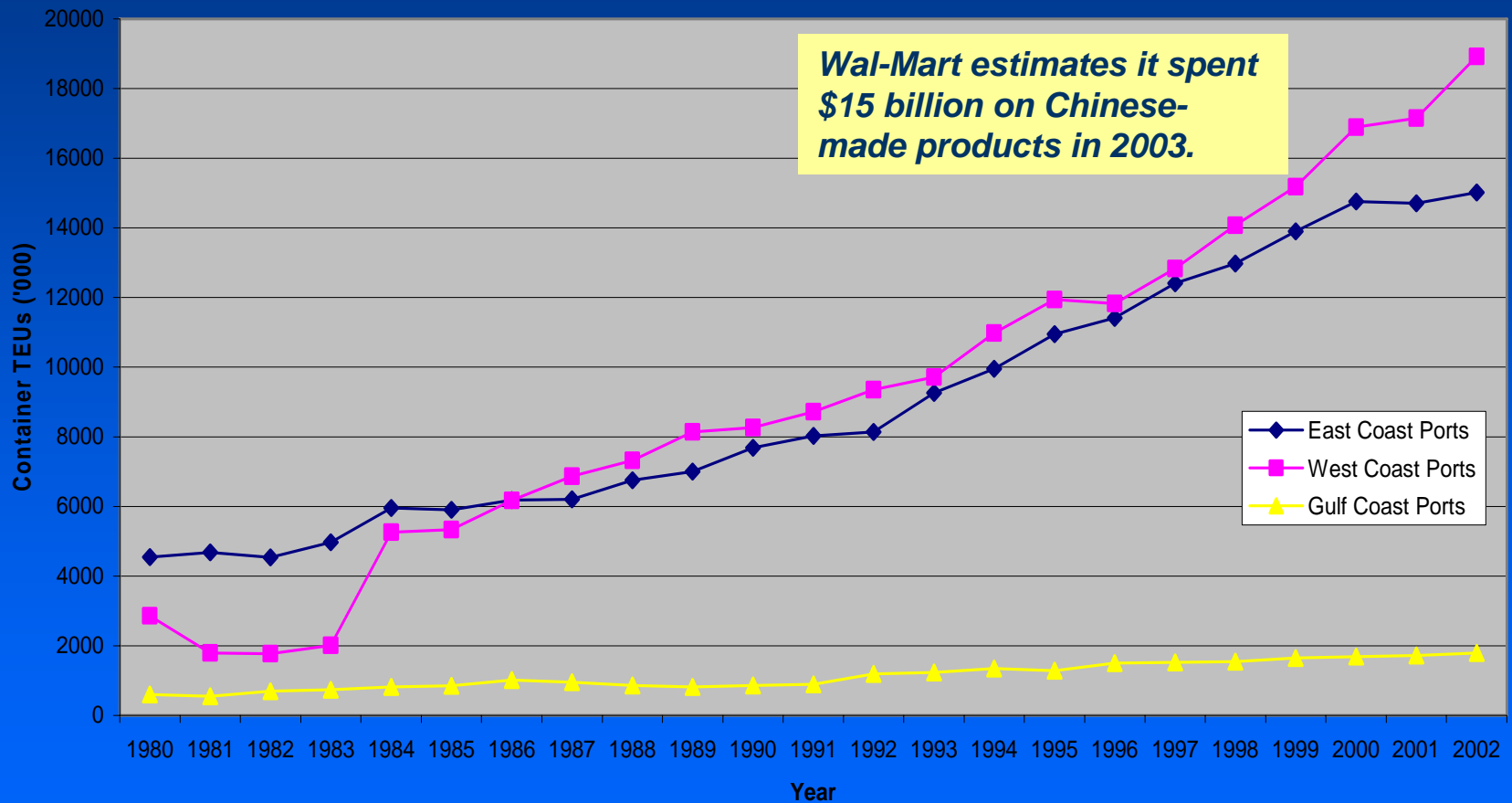
U.S. Domestic Freight Movement (2000)



Source: AASHTO, Freight-Rail Bottom Line Report

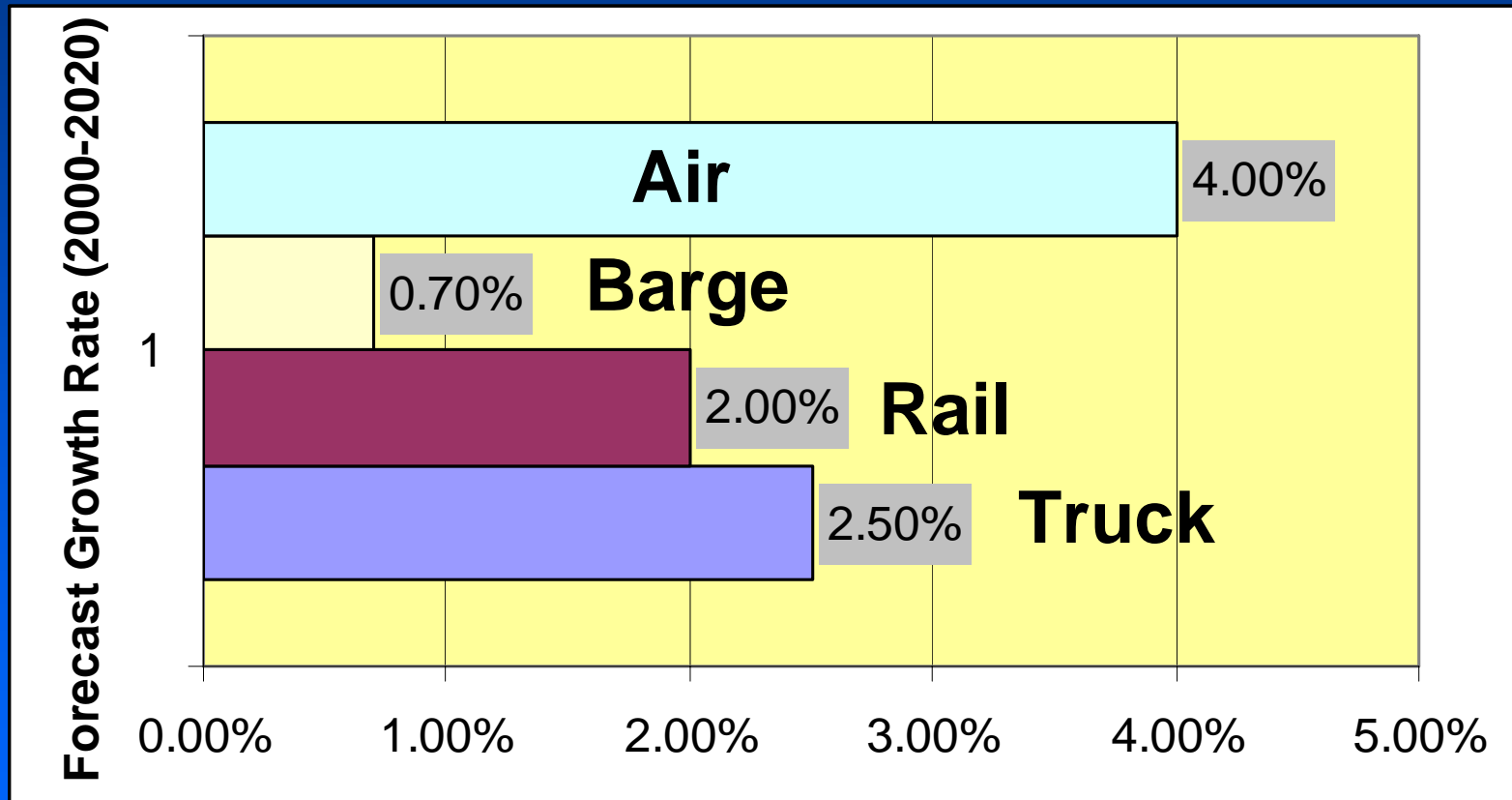
ICF Consulting

Trade – U.S. Port Container Traffic



Source: American Association of Port Authorities
www.aapa-ports.org

A Plausible Annual Growth Scenario (2000 to 2020 in Ton-Miles)



ICF

21st Century Freight Mobility Factors Impacting the Future

- Widening of the Panama Canal
- Continued “explosive” growth in the Chinese economy
- “Second wave” of the IT/Internet revolution
- System disruptions

Transportation, Technology and the 21st Century Vehicle



Transportation, Technology and the 21st Century Vehicle

- Market penetration of technology
- Privacy issues
- Liability
- Data ownership
- Anti-trust
- Costs and incentives
- Allocation of spectrum
- Human factors
- Joint deployment of entertainment and safety applications

Transportation, Technology and the 21st Century Vehicle



Technology Implications for 21st Century Transportation Systems



Technology Implications for 21st Century Transportation Systems

- Linkage between the vehicle and infrastructure
- The vehicle as a “probe”
- Requires a communications backbone
- Need “figure out” the business model
- Performance measures (that matter!!!)
- Move away from the traditional governmental approach/structure

Transportation and the Global Economy



Transportation and the Global Economy

- Transportation's role in supply-chain economics
- The disappearance of economic borders incident to world trade and the Internet
- Transportation is a competitive factor in market pricing

Transit Futures



Transit Futures

- Envisions a truly inter-modal system
- Mobility Management
- Envisions a transit funding scenario that is reliable and robust

21st Century Demographic Influences on Transportation



Demographics

- Population in the United States will grow to 553 million by 2050
- Most of the growth will be through immigration
- Depopulation of certain states
- Continued strong growth in the Southwest
- Aging population (26% over 60 by 2050)

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Policy Recommendations

Policy Issue #1- Transportation Finance

- Transportation investments must be funded from a comprehensive set of revenue choices that are sustainable and reflect consumer choice.

Policy Issue #2-Mobility Management

- The United States must establish a transportation system where all modes operate as one in a Mobility Management environment.

Policy Issue #3-

Technology Deployment

- The United States must advance the rapid deployment of technology in all aspects of its transportation system to achieve optimal safety, security and operational benefits into the future.

Policy Issue #4- Freight Systems

- Establish freight transportation systems, including highway, rail, ports, river, and air, as critical interrelated components contributing to our nation's role in the global economy.

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